**IN THE CLAIMS:**

**Please amend the claims as follows.**

1-21. (Cancelled)

22. (Previously presented) A method for performing engine baseline modeling, comprising:

storing engine data;

preprocessing the engine data into a predetermined format, wherein the preprocessing comprises cleaning the engine data;

building an engine baseline model for an engine from the preprocessed data, wherein the engine baseline model relates engine performance variables as a function of engine operating conditions; and

evaluating the performance of the engine baseline model.

23. (Previously presented) The method according to claim 22, wherein the preprocessing further comprises extracting the engine data from an engine service database.

24. (Cancelled)

25. (Previously presented) The method according to claim 22, wherein the preprocessing further comprises segmenting the engine data into a plurality of groups.

26. (Original) The method according to claim 22, wherein the engine baseline model is a regression model.

27. (Original) The method according to claim 22, further comprising validating the engine baseline model.

28. (Original) The method according to claim 22, further comprising generating rules for cleaning the preprocessed data.

29. (Cancelled)

30. (Previously presented) A method for performing engine baseline modeling, comprising:

storing engine data;

preprocessing the engine data into a predetermined format, wherein the preprocessing comprises cleaning the engine data;

building an engine baseline model for an engine from the preprocessed data using a regression analysis, wherein the regression analysis relates engine performance variables as a function of engine operating conditions; and

evaluating the performance of the engine baseline model.

31. (Previously presented) The method according to claim 30, wherein the preprocessing further comprises extracting the engine data from an engine service database.

32. (Cancelled)

33. (Previously presented) The method according to claim 30, wherein the preprocessing further comprises segmenting the engine data into a plurality of groups.

34. (Original) The method according to claim 30, further comprising validating the engine baseline model.

35. (Original) The method according to claim 30, further comprising generating rules for cleaning the preprocessed data.

36. (Previously presented) A method for performing engine baseline modeling of an aircraft engine, comprising:

storing aircraft engine data;

preprocessing the aircraft engine data into a predetermined format, wherein the preprocessing corrects the aircraft engine data to standard conditions derived for an aircraft engine, and wherein the preprocessing comprises generating rules for cleaning the preprocessed data;

building an engine baseline model for an engine from the preprocessed data using a regression analysis, wherein the regression analysis relates engine performance variables as a function of engine operating conditions; and

evaluating the performance of the engine baseline model.

37. (Original) The method according to claim 36, further comprising validating the engine baseline model.

38. (Cancelled)

39. (Previously presented) A method for performing engine baseline modeling of an aircraft engine, comprising:

storing aircraft engine data;

preprocessing the aircraft engine data into a predetermined format, wherein the preprocessing corrects the aircraft engine data to standard conditions derived for an aircraft engine, and wherein the preprocessing comprises generating rules for cleaning the preprocessed data;

building an engine baseline model for an engine from the preprocessed data using a regression analysis, wherein the regression analysis relates engine performance variables as a function of engine operating conditions;

validating the engine baseline model;

generating model diagnostics from the engine baseline model; and

evaluating the performance of the engine baseline model.

40. (Previously presented) A method for performing engine baseline modeling of an engine, comprising:

presenting a user with aircraft engine data;

prompting the user to select engine performance variables and engine operating conditions from the aircraft engine data to model;

in response to the user selection, preprocessing the engine data into a predetermined format, wherein the preprocessing comprises cleaning the engine data;

using a regression to build an engine baseline model for an engine from the data; and

evaluating the performance of the engine baseline model.

41. (Cancelled)

42. (Original) The method according to claim 40, further comprising validating the engine baseline model.

43. (Original) The method according to claim 40, further comprising generating rules for cleaning the preprocessed data.

44. (Cancelled)

45. (Previously presented) The method according to claim 40, further comprising displaying results from the evaluation to the user.

46. (Currently amended) A computer-readable medium readable by a computer system and storing computer instructions for ~~instructing a~~ execution by the computer system to perform engine baseline modeling, the computer instructions comprising:

storing engine data;

preprocessing the engine data into a predetermined format, wherein the preprocessing comprises ~~instructions for~~ cleaning the engine data;

building an engine baseline model for an engine from the preprocessed data, wherein the engine baseline model relates engine performance variables as a function of engine operating conditions; and

evaluating the performance of the engine baseline model.

47. (Currently amended) The computer-readable medium according to claim 46, wherein the preprocessing further comprises ~~instructions for~~ extracting the engine data from an engine service database.

48. (Cancelled)

49. (Currently amended) The computer-readable medium according to claim 46, wherein the preprocessing further comprises ~~instructions for~~ segmenting the engine data into a plurality of groups.

50. (Original) The computer-readable medium according to claim 46, wherein the engine baseline model is a regression model.

51. (Original) The computer-readable medium according to claim 46, further comprising instructions for validating the engine baseline model.

52. (Original) The computer-readable medium according to claim 46, further comprising instructions for generating rules for cleaning the preprocessed data.

53. (Cancelled)

54. (Currently amended) A computer-readable medium readable by a computer system and storing computer instructions for ~~instructing a~~ execution by the computer system to perform engine baseline modeling, the computer instructions comprising:

storing engine data;

preprocessing the engine data into a predetermined format, wherein the preprocessing comprises ~~instructions for~~ cleaning the engine data;

building an engine baseline model for an engine from the preprocessed data using a regression analysis, wherein the regression analysis relates engine performance variables as a function of engine operating conditions; and

evaluating the performance of the engine baseline model.

55. (Currently amended) The computer-readable medium according to claim 54, wherein the preprocessing further comprises ~~instructions for~~ extracting the engine data from an engine service database.

56. (Cancelled)

57. (Currently amended) The computer-readable medium according to claim 54, wherein the preprocessing further comprises ~~instructions for~~ segmenting the engine data into a plurality of groups.

58. (Original) The computer-readable medium according to claim 54, further comprising instructions for validating the engine baseline model.

59. (Original) The computer-readable medium according to claim 54, further comprising instructions for generating rules for cleaning the preprocessed data.

60. (Currently amended) A computer-readable medium readable by a computer system and storing computer instructions for ~~instructing a~~ execution by the

computer system to perform engine baseline modeling, the computer instructions comprising:

storing aircraft engine data;

preprocessing the aircraft engine data into a predetermined format, wherein the preprocessing corrects the aircraft engine data to standard conditions derived for an aircraft engine, and wherein the preprocessing comprises generating rules for cleaning the preprocessed data;

building an engine baseline model for an engine from the preprocessed data using a regression analysis, wherein the regression analysis relates engine performance variables as a function of engine operating conditions; and

evaluating the performance of the engine baseline model.

61. (Original) The computer-readable medium according to claim 60, further comprising instructions for validating the engine baseline model.

62. (Cancelled)

63. (Currently amended) A computer-readable medium readable by a computer system and storing computer instructions for ~~instructing a~~ execution by the computer system to perform engine baseline modeling, the computer instructions comprising:

storing aircraft engine data;

preprocessing the aircraft engine data into a predetermined format, wherein the preprocessing corrects the aircraft engine data to standard conditions derived for an aircraft engine, and wherein the preprocessing comprises ~~instructions for~~ cleaning the preprocessed data;

building an engine baseline model for an engine from the preprocessed data using a regression analysis, wherein the regression analysis relates engine performance variables as a function of engine operating conditions;

validating the engine baseline model;

generating model diagnostics from the engine baseline model; and

evaluating the performance of the engine baseline model.

64. (Currently amended) A computer-readable medium readable by a computer system and storing computer instructions for ~~instructing a~~ execution by the

computer system to perform engine baseline modeling, the computer instructions comprising:

presenting a user with aircraft engine data;

prompting the user to select engine performance variables and engine operating conditions from the aircraft engine data to model;

in response to the user selection, preprocessing the engine data into a predetermined format, wherein the preprocessing comprises ~~instructions for~~ cleaning the engine data;

using a regression to build an engine baseline model for an engine from the preprocessed data; and

evaluating the performance of the engine baseline model.

65. (Cancelled)

66. (Original) The computer-readable medium according to claim 64, further comprising instructions for validating the engine baseline model.

67. (Original) The computer-readable medium according to claim 64, further comprising instructions for generating rules for cleaning the preprocessed data.

68. (Cancelled)

69. (Previously presented) The computer-readable medium according to claim 64, further comprising instructions for displaying results from the evaluation to the user.

70. (Previously presented) A system for performing baseline modeling of a process, comprising:

a service database that contains data relating to the process;

a preprocessor for processing the data into a predetermined format, wherein the preprocessor comprises a data scrubbing component that cleans the data; and

a baseline modeling component that builds a baseline model for an engine from the preprocessed data, wherein the baseline model relates process performance variables as a function of process operating conditions; and

a model diagnostics component that evaluates the performance of the baseline model.

71. (Previously presented) The system according to claim 70, wherein the preprocessor further comprises a data acquisition component that extracts the data from the service database.

72. (Cancelled)

73. (Previously presented) The system according to claim 70, wherein the preprocessor further comprises a data segmenting component that segments the data into a plurality of groups.

74. (Original) The system according to claim 70, wherein the baseline model is a regression model.

75. (Original) The system according to claim 70, wherein the baseline modeling component (34) comprises a metric component that validates the baseline model.

76. (Original) The system according to claim 70, wherein the baseline modeling component comprises a heuristics component that generates rules for cleaning the preprocessed data.

77. (Cancelled)

78. (Previously presented) A method for performing baseline modeling of a process, comprising:

storing process data;

preprocessing the process data into a predetermined format, wherein the preprocessing comprises cleaning the process data;

building a baseline model for a process from the preprocessed data, wherein the baseline model relates process performance variables as a function of process operating conditions; and

evaluating the performance of the baseline model.

79. (Previously presented) The method according to claim 78, wherein the preprocessing further comprises extracting the process data from a service database.

80. (Cancelled)

81. (Previously presented) The method according to claim 78, wherein the preprocessing further comprises segmenting the process data into a plurality of groups.

82. (Original) The method according to claim 78, wherein the process baseline model is a regression model.

83. (Original) The method according to claim 78, further comprising validating the baseline model.

84. (Original) The method according to claim 78, further comprising generating rules for cleaning the preprocessed data.

85. (Cancelled)

86. (Currently amended) A computer-readable medium readable by a computer system and storing computer instructions for ~~instructing a~~ execution by the computer system to perform baseline modeling of a process, the computer instructions comprising:

storing process data;

preprocessing the process data into a predetermined format, wherein the preprocessing comprises ~~instructions for~~ cleaning the process data;

building a baseline model for an engine from the preprocessed data, wherein the baseline model relates process performance variables as a function of process operating conditions; and

evaluating the performance of the baseline model.

87. (Currently amended) The computer-readable medium according to claim 86, wherein the preprocessing further comprises ~~instructions for~~ extracting the process data from a service database.

88. (Cancelled)

89. (Currently amended) The computer-readable medium according to claim 86, wherein the preprocessing further comprises ~~instructions for~~ segmenting the process data into a plurality of groups.

90. (Original) The computer-readable medium according to claim 86, wherein the baseline model is a regression model.

91. (Original) The computer-readable medium according to claim 86, further comprising instructions for validating the baseline model.

92. (Original) The computer-readable medium according to claim 86, further comprising instructions for generating rules for cleaning the preprocessed data.

93. (Cancelled)